

REMARKS

Claims 21-23, 25 and 42 are currently pending, with claim 21 being independent. Claim 21 has been amended in order to remove the limitations added in applicant's prior response and to reinsert the limitation that the lattices are continuously connected to each other at a grain boundary of said semiconductor film. New claim 42 corresponds to original claim 24, which was cancelled in applicant's prior response. No new matter has been introduced.

The claims have been rejected under section 112, second paragraph. Applicant requests reconsideration and withdrawal of this rejection in view of the amendments to independent claim 21. The rejection indicates that the recitations "according to high resolution TEM" and "at grain boundary" render claim 21 indefinite. In response, applicant has amended claim 21 so as to no longer recite "according to high resolution TEM" and to recite "at a grain boundary". These amendments are believed to address the Examiner's concerns.

As amended, claim 21 recites that "lattices are continuously connected to each other at a grain boundary of said semiconductor film." This is shown in Figs. 17A and 17B of the application. For example, at a crystal grain boundary seen at the center of the photograph of Fig. 17A from top to bottom, a lattice image of the left crystal region is continuously connected to a lattice image of the right crystal region.

Claims 21, 23 and 25 have been rejected as being unpatentable over Okada (U.S. Patent No. 5,582,640) in view of Kurihara (JP 08-211367). Applicant requests reconsideration and withdrawal of this rejection because neither Okada, Kurihara, nor any proper combination of the two describes or suggests an arrangement in which "lattices are continuously connected to each other at a grain boundary of said semiconductor film," as recited in claim 21. Recognizing that Okada does not teach this aspect of the claim, the rejection indicates that it would have been obvious to include this aspect of the claims in view of Okada's description, at col. 33, line 62 to col. 34, line 22, of a third embodiment in which heat treatment is carried out to attain single crystallization such that no crystallization defects could be observed by a TEM. The rejection further indicates that the motivation for including this aspect of the claim would derive "from the absence of a deterioration in electron mobility due to crystal defects."

Applicant respectfully disagrees with the Examiner's conclusion. In particular, while Okada mentions crystal defects, Okada does not describe or suggest lattices continuously connected to each other at a grain boundary. Such lattices are much different from the crystal defects, or lack thereof, described by Okada, and, contrary to what the rejection appears to imply, such lattices would not inherently result from reducing lattice defects in Okada's third embodiment. Kurihara, which is cited for purposes of showing a personal computer, also is entirely silent as to this aspect of the claim. Accordingly, for at least these reasons, the rejection should be withdrawn.

Claim 22 has been rejected as being unpatentable over Okada in view of Kurihara and Ukai (U.S. Patent No. 4,810,060). Applicant requests reconsideration and withdrawal of this rejection because Ukai, which is cited as showing an auxiliary capacitance, does not remedy the failure of Okada and Kurihara to describe or suggest the subject matter of independent claim 21 from which claim 22 depends.

Claim 21 has been rejected for obviousness-type double patenting over claim 5 of U.S. Patent No. 6,380,560, and claim 23 has been rejected for obviousness-type double patenting over claim 16 of U.S. Patent No. 6,730,932 in view of Clark. Applicant requests that these rejections be held in abeyance until claims 21 and 23 are otherwise found to be allowable.

Applicant : Shunpei Yamazaki et al.
Serial No. : 10/753,524
Filed : January 9, 2004
Page : 6 of 6

Attorney's Docket No.: 07977-
218003 / US3531/3615D1D1

The fee in the amount of \$120 in payment of the one month extension fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 3/10/06



John F. Hayden
Reg. No. 37,640

Customer No. 26171
Fish & Richardson P.C.
1425 K Street, N.W. - 11th Floor
Washington, DC 20005-3500
Telephone: (202) 783-5070
Facsimile: (202) 783-2331
/adt
40326945.doc